

Claims:

1. A method for treating the wall of a blood vessel using electromagnetic energy, said method comprising:
  - a) delivering an EM device into the blood vessel; and
  - b) translate the EM device through the blood vessel while automatically activating the EM device to deliver a constant amount of energy per unit length of the blood vessel.
2. The method according to claim 1, wherein:  
said step of automatically activating the EM device includes automatically pulsing energy.
3. The method according to claim 1, wherein:  
said step of automatically activating the EM device includes mechanically detecting movement of the EM device through the blood vessel.
4. The method according to claim 1, wherein:  
said step of automatically activating the EM device includes optically detecting movement of the EM device through the blood vessel.

5. The method according to claim 1, wherein:

    said step of automatically activating the EM device includes magnetically detecting movement of the EM device through the blood vessel.

6. The method according to claim 1, wherein:

    said step of automatically activating the EM device includes electrically detecting movement of the EM device through the blood vessel.

7. An apparatus for treating the wall of a blood vessel using electromagnetic energy, said apparatus comprising:

- a) an EM device adapted to be moved through the blood vessel;
- b) detection means for detecting movement of the EM device through the blood vessel;
- c) a power supply adapted to deliver a pulse of power for a selected duration;
- d) switch means coupled to said power supply and said EM device such that activation of said switch means causes said power supply to deliver said pulse of power to said EM device, said switch means also coupled to said detection means such that said switch means is activated by said detection means.

8. The apparatus according to claim 7, wherein:

    said detection means is mechanically coupled to said EM device.

9. The apparatus according to claim 8, wherein:

    said detection means includes at least one roller.

10. The apparatus according to claim 8 wherein:

    said detection means includes a lever.

11. The apparatus according to claim 7, wherein:

    said detection means is optically coupled to said EM device.

12. The apparatus according to claim 11, wherein:

    said detection means includes a light source and a light detector.

13. The apparatus according to claim 7, wherein:

    said switch means is mechanically coupled to said detection means.

14. The apparatus according to claim 13, wherein:

    said switch means includes an electrical wiper contact.

15. The apparatus according to claim 13, wherein:  
said switch means includes a lever.
16. The apparatus according to claim 7, wherein:  
said switch means is optically coupled to said detection means.
17. The apparatus according to claim 7, wherein:  
said switch means includes a light source and a light detector with a shutter therebetween.
18. The apparatus according to claim 7, wherein:  
said switch means is magnetically coupled to said detection means.
19. The apparatus according to claim 7, further comprising  
e) an actuator coupled to said EM device, said actuator being adapted to move said EM device through said blood vessel.
20. The apparatus according to claim 19, wherein:  
said actuator includes a manually operated trigger.

21. The apparatus according to claim 7, wherein:  
said detection means includes a light source directed at said EM device and a light detector arranged to detect light reflected from said EM device by said light source.
  
22. The apparatus according to claim 7, wherein:  
said detection means includes a light source coupled to said EM device and arranged to direct light toward an interior wall of the blood vessel and a light detector arranged to detect light reflected from the interior wall of the blood vessel by said light source.